# Nurturing Opportunities for Educational Leadership: How Affordance and Leadership Interconnect

Ilana Margolin<sup>1</sup>

Correspondence: Ilana Margolin, Levinsky College of Education, Tel-Aviv, Israel. E-mail: mnirim@zahav.net.il

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#### **Abstract**

This qualitative ethnographic study focused on the affordances that facilitated the emergence of leadership, capturing a range of perspectives on leadership and leadership development of four groups: district superintendents; teacher-educators; mentor-teachers and graduates. The term 'affordances' implies a reciprocal relationship between organisms and features of their environment thus, becomes a critical element in leadership. The findings indicate that (a) there seems to be relationships between affordance and leadership development, but they are not obvious; (b) the kind of leadership educators adopt is based on previously experienced models; (c) variations in the leadership styles educators adopt are defined by the models they create and their exploitation of affordances.

An implication of the study is that one of the leader's main roles is the establishment of infrastructures and affordances with myriad accessible opportunities for action. The ultimate goal is to create distributive leadership in which the practice of leadership is shared and realized within extended formal top-down and informal bottom-up groupings and networks, and endures beyond a few leaders' tenure.

Keywords: distributive leadership, affordance, sustainability, ecological perspective, partnership

## 1. Introduction

Scholars have recognized the need for a critical sustainable mass of education leaders: policy makers, practitioners and researchers in order to lead meaningful reform in the field of education and to solve the leadership succession issue (Fullan, 2005; 2006; Pascal, 2009). Thus, a top priority is developing and investing in the next generation of system leaders by nurturing and expanding capabilities and talents across all levels of the educational system in order to achieve and sustain success (Fullan, 2005; Harris, 2009).

However, coping with the practicality of this complicated issue is not a trivial matter; thus, this research concerns itself with how to establish a culture in educational institutions where leaders are nurtured and develop. Drawing upon the idea that individuals have the capability to proactively shape the environment, rather than merely react to it passively, this paper enquires into some of the daily opportunities educators have or create to demonstrate leadership and the kind of leadership that these opportunities entail.

#### 2. Theoretical Framework: The Ecological Perspective

This section begins with a presentation of the ecology and sustainability perspective that is the overarching conceptual framework of the study. Then, the two sub-theories derived from the ecological perspective are presented: distributive leadership and affordance theory.

The ecological perspective refers to the totality of the world as a whole, where connections, relationships, interactions and mutual influences emerge among people and between people and their environments (Mitchel & Sackney, 2009, p. 4). According to the ecological perspective that is rooted in Capra's (2002) seminal theory, the world is a network of diverse interconnected and interdependent environmental systems in which each element is affected by and affects all other aspects of the universe (Bronfenbrenner, 1977). Moreover, within an ecological perspective the focus shifts from looking at distinct parts of an educational event or system to thinking about holistic representations within an educational space. Researchers combine the terms sustainability and ecology and use them within the same context (Capra, 2002; Hargreaves & Fink; 2006; Mitchel & Sackney, 2009).

Sustainability is about the ways in which people notice disturbances in their organizations, see compelling

<sup>&</sup>lt;sup>1</sup> Levinsky College of Education, Tel-Aviv, Israel

reasons to act, and move forward in meaningful ways to make something new as a purposeful response to meaningful disturbances. Sustainability maintains that leadership is an ongoing process leading to continuous improvement consistent with moral values of human purpose and aims at creating the succession of leaders for future generations (Fullan, 2005, p. ix; Mitchel & Sackney, 2009, p. 183). Capra (2002, p. 215) argues that from an ecological perspective, sustainable improvement is a property of the entire system that impinges on life and learning in educational organizations

This view of educational organizations as systems that make a difference in the lives of individuals (Fullan, 2006; Hargreaves & Fink, 2006) affords a rich perspective for understanding the sustainable leadership issue.

Under the umbrella of the ecological perspective, distributed leadership has emerged as an alternative to the conventional top-down heroic leadership models. If sustainability is to be ensured, the alternative to hierarchical focused leadership has to be distributed within the system and embedded within the culture. Distributive leadership involves the creative application of key democratic ideas as well as a combination of structural mechanisms and the cultural spirit of democracy (Stoll & Jackson, 2009; Woods & Gronn, 2009). As many of the main principles of the ecological approach are realized in the philosophy of distributive leadership, it helps us to anchor the modes of co-ordination, collaboration and synergistic partnerships that the leaders in our study formed. The combined leadership of many individuals in the organization is greater than the sum of the parts. In this format of leadership, the inherent interrelationship of person and social structure and of agents and their environment is asserted within democracy (Woods & Gronn, 2009).

As leaders have to establish a learning environment with sustainable improvement, the term *affordances*, which implies a reciprocal relationship between organisms and features of their environment (Gibson, 1986), becomes a key concept. Humans can, with training, and when so inclined, perceive things about their abilities and the features of the environment (Chemero, 2003) and perform actions.

As no one leader can meet the challenges of changing the complicated educational system and breaking through the status quo, distributed leadership has emerged as an alternative option to conventional top-down approaches. As leaders have to establish a learning environment with sustainable improvement, one of their main strategies is utilizing and developing affordances in their contexts: schools, colleges and districts (Mitchell & Sackney, 2009; Spillane & Diamond, 2007; Margolin, 2012). Thus, the next section reviews the research literature dealing with these two theories: distributed leadership and affordance theory.

#### 2.1 Distributed Leadership and Communities of Practice

In the context of the enormous complexity of heterarchical relations and role overload of leaders, scholars generated the concept of distributed leadership as an appropriate alternative to conventional top-down heroic approaches. The meaning of distributed leadership is comprehensive; it is re-created and activated differently in each specific context and is explored in each environment with its new realities. Leaders have to explore and learn not only what works but what works in their specific contexts.

Practically the realization of distributive leadership is not an easy mission inside organizations, and even more so among organizations bearing on whether and how to share leadership. Distributed leadership involves attributes such as democracy, pro-activity, change, collaboration involving communities of practice, ongoing learning, utilizing affordances, and capacity building. There is evidence in the literature establishing the notion that interconnectivity and interdependence of all these features is needed for successful distributed leadership.

Many of the main principles of the ecological approach are realized in the philosophy of distributed leadership. Hence, distributed leadership is about pro-activity and change of the structure and meaning of the context as well as about influence – the many rather than the few to lead (Spillane, et al., 2001; Harris, 2007). Gronn (2003) asserts that the concertive action meaning of distributed leadership, i.e., the actions performed by a number of interdependent people working together to achieve common goals, is the most significant aspect. Wenger's (1998) notion of communities of practice, where people are active participants in the activities of social communities, is a very close idea to distributed leadership. Socio-cultural perspective argues that learning occurs in a community; thus, communities of practice have individual and organizational influences that impact schools, curriculum reform, and teacher and student learning. Including all participants in a professional community enables a reciprocal learning process in which each member is a teacher and a learner simultaneously (Paredes-Scribner & Bradley-Levine, 2010; Howard & Taber, 2010; Wenger, 1998).

Studies describe changes in organizational culture as a result of collaborative learning and distributed leadership. As learning is a critical and central component of educational organizations (Mitchel & Sackney, 2009; Margolin, 2012) leaders have to create a safe and protected collaborative and supportive culture that gives rise to increased

learning. Recent research has highlighted the most important leadership skills for organizational success in the next few decades. These include collaboration across boundaries and the ability to build effective teams (Martin, 2007). Distributed leadership allows and supports a range of modes of collaboration between actors, synergistic partnerships, co-ordination and role interdependencies and creates patterns of relations in which the emergent joint unit becomes more than the sum of the parts (Woods & Gronn, 2009). However, it is rare to find among the proponents of distributive leadership theory detailed engagement with the contradictory structures of the hierarchical educational institutions and the leadership of communities of practice. Moreover, studies presenting the advantages of distributed leadership in many cases avoid investigating micropolitics in organizations while engaging with standard operating procedures. Distributive leadership has to merge with micropolitics and examine conflicts that are inherent in organizations. This study looks at distributed leadership and the micropolitics that shape it and serve as a source for generating the information about what matters most (Flessa, 2009). It takes into account the micropolitics of the organizations and emphasizes the various contexts of the participants.

## 2.2 Affordances and Leadership

As working conditions are a main component in developing leadership, a key role of formal leaders is to orchestrate the conditions and construct as well as highlight opportunities and affordances in order to determine leadership potential and develop future leaders (Harris, 2009; Mitchell & Sackney, 2009).

Affordance can be thought of as possibilities for action (Norman, 1988; Tella & Harjanne, 2007), and as a main strategy of distributed leadership. Learning and renewal are key processes of the affordance theory and hence enable leadership development. Moreover, learning every day, individually and collectively, is most powerful when it is integrated into action in the work setting (Fullan, 2006; Sparks, 2009). Thus, as affordances are relations between the abilities of the leaders and some features of a situation, the community of leaders has to adopt a holistic approach to their specific environment and utilize the various kinds of action this approach affords.

However, relationships do not exist a priori; leaders have to establish them, although this establishment is often accompanied by a struggle (Hallett, 2007; Mitchell & Sackney, 2009). Namely, leaders have to adopt and devise powerful strategies in order to establish mechanisms that make this culture a reality in practice. One of the most powerful sets of strategies for facilitating affordances that develop sustainable leadership, learning and change consists of capacity building in tandem with autonomy and time to act in accordance with beliefs and values (Fullan, 2005, 2009; Spillane & Diamond, 2007).

The structures have to provide opportunities, namely time and space, for collaboration. Then mechanisms such as learning through dialogue, discussion and open debate, common planning of times and norms that sustain collegial relationships are developed. Scholars have suggested that professional learning communities promote a sense of teacher professionalism through collegial interaction by creating the conditions for shared professional standards to emerge (Paredes-Scribner & Bradley-Levine, 2010).

Though empirical studies of distributed leadership have shown organizational changes and patterns of achievement outcomes (Leithwood & Jantzi, 2008), leaders still have difficulty in exploring their own particular context and linking it to leadership (Hallinger, 2011). In order to be adaptive and responsive to the changing conditions of their organization as well as to the whole system over time, leaders must identify and cope with the constraints and opportunities extant in their environment.

In the light of this literature, the aim of the study was to investigate how educational organizations develop future leaders. Namely, in contrast with many studies that are prescriptive, based on values rather than data, this study attempts to show how distributive leadership applies to their particular organizations and copes with the unique problems, opportunities and peculiarities it contains (Hallinger, 2011).

The specifics of the research will deal with the following:

- 1. How are concepts and leadership theories translated by change initiators into daily practical actions in order to develop and sustain leaders?
- 2. What are the affordances that attract people to accomplish leadership and what are their sources?

## 3. Context

This study focuses on one dimension of a three-stage longitudinal research project involving a partnership between one of the largest teacher education colleges and the largest district in the Ministry of Education in Israel. The Ministry of Education is divided into five geographical districts each of which is managed by a

District Head. The central district is the largest, consisting of 60 local authorities and comprising about 360,000 pupils studying in more than 3200 schools and kindergartens and supervised by about 70 superintendents.

The first stage of the project established partnerships between the college and several schools in the district during the years 2002 – 2006 within the framework of an experimental program initiated by our teacher education college. The program aimed to be integrative, coherent, and responsive to the changing needs of the educational system and to the requirements of the National Council of Higher Education. One of the program's main principles was preparing teachers collaboratively with the field by establishing partnerships between college and schools (Margolin, 2011).

The first stage successfully accomplished an alternative and innovative school-based teacher education program based on five interrelated principles: an inter-disciplinary orientation to curriculum emphasizing integration of and connectivity between disciplines and content in order to improve instruction; cross-specializations designed to teach candidates in elementary, special education, and early childhood together in mixed cohorts; partnerships between the college and local schools; a technologically rich learning and teaching environment where computers are used as mind-tools to expand sources beyond the current setting and a culture inquiry, observation, documentation and analysis of practice (Margolin, 2011).

In the second stage during the years 2006 – 2010 the experiment was implemented across the whole college. The core leadership of the new program was comprised of many of the teacher educators who participated in the 2002-2006 experiment. Moreover, as creating partnerships with schools and with superintendents of the Ministry of Education was at that time one of the main principles of the programs, the college continued these relationships and deepened them. In the third stage, which overlapped the second, the District Head invited the college to assist her in her attempt to lead the district's agenda in tandem with a national reform. She was bothered by poor academic achievements, multiple agendas and the gap between policy and implementation in the district. At that time the researcher was the head of the experimental teacher education program in the college and she accepted the challenge and took the roles of facilitator. A professional community of superintendents was initiated. Thus, the leadership of the original experiment now involved school principals, mentor-teachers in cooperating schools, superintendents and other practitioners.

From this stage till now the leadership is distributed among superintendents, teacher educators, principals and mentor teachers. All meet for group discussions about the district agenda and lead the national reform collaboratively. Together, they plan their continuous learning according to the specific needs of each group. Moreover, they visit schools in which they observe lessons, give feedback and reflect on the institutional agenda and innovations from their varying perspectives. In this routine of collaborative learning in situ, each member is a teacher and a learner simultaneously. The various expertise of superintendents, teacher educators, principals and teachers broadens the perspective of each member, develops them and enables continuous learning and supports experimentations and innovation.

## 4. Participants

The participants of the present study are 48 representatives of the four populations that took part in an experimental school-based teacher education program (2002 – 2006). The first group consisted of eight graduates of the teacher education college (GR) who participated in the experimental program as students and who became teachers, each in a different school; the second group consisted of 12 teacher-educators (TE) from the college faculty; the third group consisted of eight mentor-teachers (MT) and their principal from one of the college's partner schools; the last group consisted of 20 superintendents (SU) who comprised the leadership of the largest district in the Ministry of Education and the District Head. The superintendent group was comprised of general and professional disciplinary superintendents: mathematics, English, and Hebrew language as well as the superintendents of the counselors and of the psychologists. The mentor teachers, the teacher educators and the superintendents continued to be partners in the new teacher education program designed and activated in the College. The participants were female except two male superintendents and one teacher educator.

The researcher was the leader of the experimental program (2002-2006) and the coordinator of the college-school partnerships until 2006; thus she was immersed in the different cultures and routines of the collaborating organizations and was able to mitigate the power struggles among them. In this position she worked with all four groups simultaneously; thus, in a sense, she was perceived as a boundary spanning leader (Miller, 2008). Since then she has co-led the professional community of the superintendents together with the District Head with whom she has established trustful relations. Being a member of the college management, trying to inquire into her practice and publish her studies and concurrently enacting systemic reform in the district required boundary spanning as a leader as well as a researcher. She succeeded in integrating these

two-fold missions owing to her primary long term agenda to reduce the gap between the college and the schools, between theory and practice (Margolin, 2011).

#### 5. Methods

## 5.1 Design and Purpose

The aim of this study is to gain a greater understanding of the conditions and spaces that inspire leadership to emerge and leaders to develop in educational settings.

Drawing on a naturalistic paradigm, an ethnographic study (Corbin & Strauss, 2008) was conducted in which an attempt was made to capture a range of perspectives on leadership and leadership development of novice teachers, experienced teachers, teacher educators and superintendents. The methods employed in this study emanated from the efforts to enquire deeply into the real life daily norms, actions and routines that foster leadership. Thus, the discourse and practices of the four groups were analyzed focusing on the relationships between affordances and kinds of leadership.

Moreover, the core of the ethnographic method consists of systematic analysis of context as a general framework. Thus, as central importance was attributed to the various cultures of the different groups as well as to the whole unit of leaders, not only was the discourse of the participants analyzed but also its relationships with their institutional cultures (Titscher, Meyer, Wodak & Vetter, 2000).

#### 5.2 Data Collection

Data was collected for this study from various sources: (1) transcripts of audiotapes of 20 superintendents' professional community group discussions and observations during one academic year; (2) transcripts of audiotapes of discussions of four focus groups: superintendents, teacher educators, mentor teachers, and graduates; (3) transcripts of audiotapes of interviews the researcher conducted with eight of the participants (two from each group) to ascertain their views relating to affordances and leadership.

In order to strengthen the validity as well as the reliability of the study, triangulation was made among all sources of data and between them and the theory. Findings were also presented for a members check and their opinions were taken into account while reanalyzing the data. Moreover, semi-structured interviews were held with main participants in order to examine and validate not only the coding but the findings as well.

## 5.3 Data Analysis

Data collection and data analysis involved a dialectic interplay; thus, the analysis processes were not conducted chronologically; the interviews were held after the first phases of coding. All transcripts were analyzed qualitatively using open coding (Corbin & Strauss, 2008), which consisted of six processes:

- 1. Reading through the corpus of data and generating concepts and themes within each group's discourse.
- 2. Deciding on the main concept of affordance through a dialectical process between the data and distributed leadership theory.
- 3. Using the concept and relating it to leadership in order to develop a set of categories.
- 4. Analyzing the categories which reflected the central and most important themes in detail, exploring their precise meanings and their relationships to other categories and choosing one central category that represented all the groups: Collaborative work in teams.
- 5. Using the constant comparative method (Glaser & Strauss, 1967) in order to determine similarities and differences among the groups and dividing the central category into subtopics.
- 6. Interpreting cultural patterns and key events by analyzing the specific contexts and presenting salient examples and citations.

## 6. Findings

In order to understand the phenomenon of the emergence of leadership among the four groups of participants, this paper focuses on two main themes mentioned by all the participants: the potential for action, namely opportunities and affordances of the environment for leadership, and the kinds of leadership that leaders implemented emanating from these affordances.

Various types of leadership and affordances mentioned by all four added groups were identified in the data analysis and the kinds of leadership that emanated from these affordances were analyzed. However, due to space constraints the focus was put on one main heading divided to sub-categories:

Collaborative work in teams

- Belonging to a team and leading collaboratively
- Creating and utilizing spaces
- . Working with leaders mentoring
- . Working from a systemic holistic approach

## 6.1 Collaborative Work in Teams

All four groups were exposed to many opportunities to work together in teams of various kinds, through which they experienced novel learning and teaching possibilities and built diverse and complex competencies of cooperation. The working environment that was created during the experiment was a safe space in which students and faculty co-learned and taught, mentored one another, built rich technological environments together and communicated through virtual tools (Margolin, 2007, 2011). The superintendents' group created a unique learning framework of a team working together intensively and leading school change with the principals and teachers throughout the school year. In the school of education at the College, faculty members in conjunction with teams of teachers were learning in communities of practice and leading changes in schools. The collaboration spread not only inside the different institutions but also among them. The leaders generated mixed communities of practice in various schools and in the district where superintendents collaborated with principals and teacher educators or teachers learned together with student teachers and supervisors.

Leaders indicated four main elements of collaborative work.

Belonging to a team and leading collaboratively

Participants indicated the importance of a sense of belonging to staff at work and the contribution of their joint leadership. The school principal and teachers in Hareel school emphasized school culture and relationships as critical to learning and success; as the principal (MT) said:

Without an appropriate atmosphere there will be a climate in which there is no learning, no work. We generated security, stability, relationships of trust; no one can decide without mutual consultation and transparency. Once the ego is deleted and everything is on the table and it's okay to say 'in my class there is a problem'; there is no war or jealousy; everything is decided according to the school needs... It causes people to do the maximum. Everything begins and ends in human relations ... (Mentor Teachers' focus group, 6.2010).

This school principal created opportunities for collaborative work that would make the most of staff members' collective capacities and learning. On the one hand it was clear that she was the leader who took the reins and responsibility, but on the other hand she consulted, reduced competition and challenged the teachers to embrace sharing leadership to leverage the powers of teams. She operated out of respect for teachers, encouraging transparency and trust in the team and served as an ego-free leadership model. Teachers did feel a sense of belonging and security, enabling them to take risks and fail, knowing that the principal was a partner to the failures.

The vice principal (MT), like the principal and other colleagues in the team, felt "a sense of belonging and strong emotional attachment and commitment to school". Therefore, her commitment also contributed to its proper management. The school culture made her a groundbreaking leader, intervening in formal and informal issues. On this subject, she said: "...you know where you need to break with formality and what you have to change and how to take responsibility and where to intervene to make the system work, to find right solutions".

Such a learning environment also produced frames of mentoring as necessary, in which each leader was a mentor or mentee at different time periods, as the vice principal explained: "You mentor anyone that needs it; each one doing what she knows best; there are various models of success in our group" (Mentor Teachers' focus group, 6.2010).

It was surprising to hear two of the superintendents also indicate the importance of their group being "devoid of any ego maneuvers" which brought the group to "shared leadership and growth". Superintendents as well as the principal and teachers adopted encouraging, sharing, ego-free leadership and indicated it as a change from their previous patterns of leadership. These leaders recognized the importance of the learning environment in which they operated and its impact on their performance, but understood that their leadership patterns were the result of context, as well as their input for its change. Most of them understood that relationships of trust, respect, transparency, and removal of ego were pillars of the organizational culture which they were responsible for leading. They also realized that creating such an environment that encouraged development of future leaders was an affordance for which they were responsible.

The changes in the district culture ensued first and foremost from the collaborative community of practice that enabled the breaking borders between the policy makers i.e., the superintendents, the head of the districts and college i.e., the teacher educators. They generated a new culture of distributive leadership including representatives of various sectors that plan, activate, reflect and learn together.

Creating, and utilizing spaces

Thus, creating conditions and opportunities for learning and working in teams became one of the main tasks of the leadership perception of teachers, principals, superintendents and college faculty members, as noted by Edna, head of the school of education (TE):

This is leadership: to go and look for the conditions, create them in order to realize my moral purpose... That's one thing, burning in your bones, you are ready to pay the price, you tell everyone 'that is what I do', I don't care what you want, and it arouses resistance (Teacher Educators' focus group, 8.2010).

Edna was a leader with a deep personal ideology, and she was aware of her responsibility to create opportunities and conditions for the realization of her ideology. Edna knew that leading change in an organization was a complex process, but she took the risk and invested heavily in her search for opportunities and conditions.

Sharon, the head of the elementary school program (TE), also saw her role in creating learning spaces and shared leadership in her program:

The opportunity is feedback talk after class including the teacher [MT], student teachers and myself [TE]; there we establish interpersonal relationships... We have created a space where everyone could take leadership; as they took over, we [the supervisors] cleared the stage, it's a different kind of leadership... I should have the confidence to let others take over the stage. I'll only call myself a leader when I have caused and allowed other people to lead... (Interview, 11.2010).

As a leader, Sharon created frameworks for providing feedback and discourse after the lesson, in which she participated as a partner with the student teachers and mentor teachers. The type of leadership she adopted was that of creating opportunities and developing leaders within the context she was operating in. In other words, by creating a shared learning space and leaving the stage open to other players, she developed school leaders, which was unexpected change from her previous behavior.

The superintendents also saw themselves responsible for creating learning opportunities for principals and teachers in schools. Many of them stressed the fact that their experience of collaborative frameworks and safe learning spaces provoked the awareness, the desire and ability to lead. The special opportunity given to the superintendents working as a team, therefore, was highlighted by them as a generator of change. Liany (SU) gave the following explanation:

Our town has group of supervisors working together and visiting schools together. As a team we gain insights by sharing dilemmas and listening to each other. In this way we have developed a shared vision and we are able to break the cycle of at risk children while we all bring ourselves to new heights professionally (Superintendents' focus group, 10.2010).

This opportunity helped superintendents to shape boundary breaking leadership. The boundaries between comprehensive and disciplinary superintendents as well as between them and the tutors and principals were broken. The pattern of their leadership became shared – thinking, debating, changing and linking to theory. The superintendents' team presented a significant opportunity that enabled them to build collaborative leadership, which influenced the school culture in particular and the whole district in general.

The personal experiences of the superintendents in safe learning frameworks in which they could consult with colleagues and learn and work together made them rethink their roles of leadership and undertake new priorities. They realized that one of their major functions was to create conditions that allowed opportunities to change the learning environments in organizations and develop more leaders.

While developing shared understandings about their organizations, teachers, superintendents and teacher educators saw the creation of spaces and mechanisms that could underpin a sense of changing the educational environment and developing additional leaders. They also afforded opportunities to work with significant leaders.

Working with leaders

Participants in all groups noted that a nurturing leader gave them an opportunity to build leadership capacities, to be empowered and to shape their perceptions of leadership. The methods supervisor of mathematics, Hana (TE), was a leader who left a mark on many students and teachers with whom she worked. Vivi, one of Hana's mentor

### teachers, remarked:

I went through a process of thinking with Hana [TE)] which was really a great privilege, and I underwent a conceptual change in thinking of what really matters and where I should lead. I have faith in myself first as being able to lead any change, and the belief in the colleagues I am supposed to lead and mentor... (Teachers' focus group, 6.2010).

Vivi who was empowered by the supervisor, became a leading teacher of mathematics and developed a different perception of herself and of teaching mathematics. Furthermore, she became a capable leader who believed in herself and her ability to lead change. The change led by Hana in the school was the construction of frameworks to learn from practice. These included observations in classes, demonstrations of mathematical discourse with pupils, analyses and feedback – linking them all to theoretical learning in the professional community.

Like the mentor teachers, the school principal and superintendents spoke about leaders that empowered them, created opportunities for leadership for them and served as models through which they are developing their own leadership. Hava, the school principal said that the one who conceived the idea of partnership between the school and the college was Sonia, the District Head: "She believed a leader must support the followers and not let them fall. She did it all the way... every time I need help I can apply to her." Hava saw in the District Head an initiator leader, bringing changes and supporting her followers, a model she adopted for herself. The superintendents also saw a model of leadership in the District Head:

Her (District Head) presence in the professional community was important, because through you [researcher] and Sonia, I had a model; I went into the field feeling much safer. Our professional community gave me confidence in my image as a superintendent and also beamed out. There is security in belonging to a group of people that lead... (Superintendents' focus group, 10.2010).

Kory (SU) marked the regular participation of the District Head in the learning sessions of the superintendents, which broadcast a clear message about the importance of this learning framework. She saw in the Head a supportive and empowering leader who herself was simultaneously a learner and a teacher. In this framework Kory built her leadership capacities and became a superintendent who was confident in herself and conveyed this in the field.

Teacher educators also pointed out the significant learning and experience through leaders that helped them in formulating their own leadership; as Sharon (TE), the Head of the elementary school program said in an interview held with the researcher:

You [researcher] made a lot of people recognize opportunities. All the opportunities we talked about, you created them: the co-teaching, the learning of theory, it has a lot of repercussions now. You caused people to understand through experiencing the complexity of reality and leadership. Awareness of context made us understand that there are opportunities all the time, but you should see them, understand them and realize them. People are not aware; if you are aware there is a chance to do something (Interview, 11.2010).

Sharon (TE) saw in the leader of the experimental program (researcher) a model for leadership, especially in the sense of creating a variety of options that gave rise to leadership. She noted that the researcher also increased the participants' awareness of opportunities, allowing them to take and use them as leverage for leadership. Sharon herself formulated a model of leadership from what she learned from working with leaders and created numerous opportunities that enabled other leaders to develop. She declared: "My goal is to help the people mature. From what I know and experienced: modeling -- instead of talking about what to do."

There is ample evidence that modeling demonstrated by significant leaders was a key ingredient for constructing future sustainable leadership. The mentoring offered spontaneously by these leaders as an affordance to their colleagues was an important scaffold for building their own perception and style of leadership.

Working from a systemic holistic approach

A common reoccurring component among many of the leaders in this study was that they operated from a holistic systemic point of view. Teacher educators realized that they should operate and learn in conjunction with the field in partnerships and learning communities in order to bridge the disconnection between the college and schools; according to Hana (TE) the mathematics methods supervisor:

The partnership is an opportunity to create linkage and relations among all the elements; it is a holistic vision making connections consistent with the concept of the experimental program... I led the change after someone took care to create this platform of partnerships and the training model and teaching... (Interview, 10.2010).

Hana emphasized the opportunity created by the experimental program leaders through the partnership platform, which facilitated change and developed leaders. She operated from a holistic perspective and was aware of the contribution of this perspective to developing leadership.

The superintendents, who had a great deal of power within the system, gained a completely new perspective on what was happening around them, as Liany (SU) pointed out:

... It's not just being in meetings all day and committees, but to be in class, looking for something more holistic. See the whole. You cannot just see something that is related just to you, to your professional field, you should see something much more inclusive. The responsibility is shared... I realized I could recruit them all into my area... (Superintendents' focus group, 10.2010).

The superintendents discovered, from the opportunity created by the District Head for stopping, thinking and learning collaboratively that the responsibility for the conduct of the district rested on their shoulders and they had to be acquainted with the whole picture. Ava (SU), a superintendent of high schools, also felt the transformation in her leadership:

We moved away from bureaucratic business and we turned our agenda into something cohesive... You have the autonomy to decide... recruiting partners, tutors, superintendents, and how to deftly mold and shape all of them, to create a systemic process... Executive greenhouse of the superintendents, the principal, the teachers, each growing someone else... The issue of values is the foundation that can direct a person who takes responsibility to lead people... It upgrades the work processes of the district. In different contexts at the district level there is a thread that combines us together. District thinking is developing district leadership (Superintendents' focus group, 10.2010).

Ava (SU) described the options that were opened to her for collaborative leadership with other superintendents, as well as principals and teachers beyond the bureaucratic contact that she had previously experienced. As an autonomous leader she began recruiting people to build a collaborative systemic process, promoting the goals, and taking responsibility to direct and to lead change with others. Ava stressed the common denominator of the whole district and improved the district work through a holistic view. Moreover, Ava was also aware of the need to encourage new potential among teachers and principals and to accept the responsibility all functionaries have in developing future leadership. Thus, in addition to the individual professional development of the superintendents, the change of the superintendents' roles and their role perception extended to the whole sector; thus it became district wide.

As seen through this data, the leaders recognized the great significance of a holistic perspective. The core of this perspective is the engagement of all elements as interconnected and interrelated, creating an environment that afforded the relationships among people and elements, or in Heifetz and Linsky's words (2002, p. 2): "staying on the balcony and being on the dance floor simultaneously."

## 6.2 Variations in Kinds of Leadership

Many of the opportunities the participants experienced were similar in nature. The leadership styles that emerged in all added four groups had features in common, such as the responsibility leaders felt for creating diverse opportunities for learning, their joint action through a holistic perspective and the desire to foster leadership. The differences among the leadership styles fell on a continuum. At one end there was the traditional hierarchical leadership style where leaders saw themselves as guides and examples of conduct and made decisions alone, while at the other end, there was distributed leadership style where leaders saw themselves as members of a group and identified opportunities and affordances and encouraged growth of leadership of others.

The recent graduates who were new teachers were very close to the traditional end of the continuum and this was reflected in the administrative roles that some of them already had. Shylla (GR), a recent graduate who was working as a coordinator, said: "I was afraid to come against the team and say... you have to be the director and give instructions. You can insist and say I am the principal and I decided to..." Shylla still hesitated between a hierarchical leadership that forced itself on her followers and collaborative leadership which she experienced in the experimental program.

Natasha, (GR), also a recent graduate and at the time of the research a coordinator of early childhood classes in her school, showed two faces in her style of leadership. On the one hand she said, "In some things I was a policeman..." She acted as an initiator leader, but in a hierarchical, alienated and monitoring way, feeling a constant commitment to external demands of standards and grades. On the other hand, when the school principal sided with parents and opposed her perceptions, Natasha still dared to act against the principal's hierarchical direction and voice her objections.

The superintendents also experienced the creation of collaborative learning opportunities and a model of distributed leadership, but each one implemented this model according to a personal conception at a different rate. Liat, a new general superintendent, described herself among the principals and teachers in her district as the leader of a learning model similar to that which she experienced and stressed its many benefits. However, members of the college, working in conjunction with the schools in her district argued that she made the model "an instrumental technical tool, which helped her maintain her hierarchical management style." Edna (TE), the head of the school of education, described it in a completely different manner. Edna believed that Liat's implementation of collaborative leading model which the superintendents experienced was adjusted to her hierarchical leadership pattern at the traditional end of the spectrum, requiring control of proceedings and horrifying the principals.

Another significant disparity in leadership styles was seen between those who knew how to identify opportunities, take them and leverage them against others who did not identify the opportunities or chose to ignore them. In one of the partnership schools there was a serious problem in teaching mathematics in higher grades which required deep thinking and a radical solution of changing the school timetable. Hana (TE) and the students training in the school recognized the failure of the pupils and unsuccessful teaching and offered creative solutions for the problem. Liat, the superintendent, after being summoned by school principal, heard about the problems and solutions suggested. However, she totally ignored the suggestions that were raised by the teacher educator and the students. Liat (SU) had not learned the details of the problem and did not create the conditions for the realization of solutions. Thus she missed an extraordinary opportunity for improving teaching and demonstrating leadership.

In contrast, two other superintendents recognized the extraordinary opportunity presented to them when they became a team and built a new model of supervision.

Liany, the counselors' superintendent described the change in her leadership style:

When I was invited to join [the professional community] I had a great fear...; The District Head sits with us, giving her time and enabling discussion in which you can bring up anything. These masters who sit here... But slowly I felt something began to influence my professional identity... I could never before dare to bring up my mistakes. The veterans seemed unapproachable. Today, there is a space where I can apply to these colleagues on a personal level and also present the weak and difficult parts of myself. I'm not afraid to expose myself... (Community session, 10.2010).

Liany (SU) described her loneliness and insecurity in the company of veteran superintendents. However, she gradually began to participate in the group, learn together with colleagues and soon felt safe enough to expose her difficulties and consult with them. Through the group she evolved, re-formulating her professional identity and changing the pattern of her leadership: "I went into this being the one who decides on what works. I knew how to run the organizational and technical level of being a superintendent, but now I can give more content and more meaning to participants." Instead of instrumental organizational leadership, Liany (SU) embodied a deep and complex leadership filled with content and meaningfulness:

There was something with a lot of ego; I believed that my success was personal. Today I feel a change in this attitude. I really can benefit from success of others. I have the opportunity to learn in-depth orientation. Learning by doing... It's the time frame when we sit together; it upgrades the activities. I feel professional and personal growth (Community session, 10.2010).

Liany learned to lead collaboratively with colleagues and to give up the centrality of her personal successes. Instead of soloist leadership she became an ego-free leader, who knew the ecological environment well and was able to transform herself while leading a sustainable change in the context.

Through the data it can be seen that there were variations among the leaders belonging to the same group in the ability to identify affordances and elevate them as well as in the type of leadership they adopted. However, among all the leaders there was the close connection between the affordances available to them and the types of leadership developed.

## 7. Discussion

## 7.1 Affordances and Leadership

This paper focused on affordances in the educational environment and their relationships with leadership development and various kinds of leadership. This, by presenting an account of how a bottom-up distributed leadership of teachers and teacher educators emerged and incorporated with top-down leadership of policy makers represented by superintendents.

Due to the fact that the affordances for leadership are often latent in the environment, it is necessary to expose them in order to make people notice them, and then to demonstrate the functionally significant potential embedded in them in order to understand their advantages and capitalize on them. Through the affordance of participating in a professional community of learners, for example, superintendents revealed that they are not only policy makers but also learners and they experienced collaborative learning with their colleagues in schools. Moreover, through their experiences, two insights became evident: a. It is important to expose the latent affordance of collaborative learning and b. It is no less important to initiate and lead communities of practice in schools that experience multi-disciplinary learning in heterogeneous communities of tutors, principals and teachers. We learned from the outcome of the communities of practice that spread all over the district that the change was not only an organizational change, but also a transformational one that could be traced in the educators' perception of their roles. These also resulted in higher achievements in many of the schools and to significant improvement in their climate (see Tabak & Margolin, in press).

However, our findings show that establishing a platform for learning and experimenting distributive leadership does not occur automatically. Leaders worked hard and tried new and unpredictable actions and norms in order to make the shift in their conceptions and behaviors and transform the hierarchical organizational culture into a more democratic and collegial one. Given the opposing cultures of hierarchical organizations and communities of practice, it was difficult to persuade superintendents and clinical supervisors to enter into a community of practice and meet every week for the purpose of mutual learning, or to persuade superintendents to try a new model of co-supervising. Such measures often result in resistance and require a change in the culture of the organization, on one hand, and a transformation in conceptions and beliefs of educators on the other (Margolin, 2007, 2011).

The leaders explained that their conceptual shift had been achieved by building their leading and collaborative capacity through participation in new daily experiences. The emphasis on consistent and enduring learning by doing in their own setting created a turnabout in leaders' beliefs, expectations and interactions and made them build a new vision and agenda in their organizations.

The main characteristics of the new leadership patterns were:

- . The leaders were not soloists anymore; instead of being all knowing, leaders carried out types of co-leading.
- . They adopted a holistic approach to their educational environment instead of looking at distinct parts of the system.
- Most of them understood that one of their main roles as leaders was to establish learning environments with myriad accessible opportunities for action and to make educators perceive and utilize them.
- . They felt responsibility for sustaining continuous direction in their organizations and for developing others as leaders.

## 7.2 Implications

There are several implications that stem from this study. One implication is concerned with relationships between leadership and affordances, and another deals with change and sustainability. What is surprising about the findings of this research is that something seemingly self-evident and mundane, such as utilizing the relationships between affordances and leadership, requires great endeavors from educators. Moreover, in contrast to the stated missions and roles of leaders, it is surprising to see how such supposedly simple tools can generate meaningful reform and how important it is to investigate each specific context.

Change in organizational structures: Fostering collaborative actions and establishing leadership infrastructures that, on the one hand, change the culture of organizations and, on the other hand, continue beyond their cycles of leadership are essential for developing new kinds of leaders. However, the shared leadership that leaders adopted was an antithesis of the systemic traditional leadership they were used to.

An encompassing impact of change: The study shows that many leaders crossing borders shaped new organizational cultures at the boundaries of the organizations and all over the district. These cultures are characterized by individual transformations and organizational shifts: from demanding the principals' responsibility for students' learning, superintendents and teacher educators shared commitment with them; from inspecting and negotiating procedures outside of the classrooms, the superintendents observed instruction within them; from using intuitive and diffuse language, superintendents began using clear, professional, and mutually agreed-upon language anchored in the research literature; and from a local, fragmented, and closed work environment, the network developed into an integrated, connected, and open one (Tabak & Margolin, in press).

Thus, one of the most important fruits of the leadership development described in this study was the establishment of a coalition of leaders crossing borders at all levels of the educational system: local school level, district level and teacher education college level. The common language of practitioners and policy makers, their multidirectional communication, the coherent messages and deepened strategies, their shared ownership and commitment at all levels created an innovative kind of leadership. The new language of mutually embedded leadership and learning and the team effort of practical leading is influencing policy level and reframing the educational environment at the school (Møller, 2007).

These findings respond to the issue of sustainability and of the leadership succession crisis and demonstrate how distributive leadership can endure beyond the present leaders' tenure through the infrastructure and affordances established for developing leadership. The findings imply that individuals who create affordances for others assure continued leadership. Fostering leadership in such a way facilitates the establishment of a sustainable mass of education leaders – policy makers, practitioners and researchers – who will advance significant reforms for the future of the field.

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